Andropause
Let’s Pause It
Men’s Health Week

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Common health conditions associated with aging
Depression  Atherosclerosis  Hearing loss  Osteoarthritis
Chronic obstructive pulmonary disease  Certain Cancers  Diabetes (especially Type II)  Central Nervous System Diseases
DEFINITION

A group of symptoms which consistently occur together, or a condition characterized by a set of associated symptoms, including fatigue and a decrease in libido, experienced by some middle-aged men and attributed to a gradual decline in testosterone levels.

It may result in significant alterations in the quality of one's life, and adversely affect the function of multiple organ systems.

SYNONYMS

- PADAM: Partial Androgen Deficiency In Aging Male
- ADAM: Androgen Deficiency In Aging Male
- ADENOPAUSE
- MALE CLIMACTERIC
- VIROPAUSE
- RELATIVE HYPOGONADISM
- HYPOANDROGENEMIA
- LOH: Late Onset Hypogonadism
- MANOPAUSE
- MALOPAUSE
- SOMATOPAUSE
Physiological effects of testosterone

- **CNS** → libido, energy, spatial cognition, well being, memory
- **Larynx** → lower voice
- **Liver** → lowers SHBG and HDL
- **Kidneys** → raises erythropoietin
- **Prostate** → increases size and secretion
- **Genitals** → development, erection, spermatogenesis
Function......

- Skin → increases facial and body hair and sebum production
- Blood → increases hematocrit (PCV)
- Adipose tissue → increases lipolysis, loses abdominal fat
- Bone → increases bone mineral density
- Muscle mass → increases lean mass and strength

Causes
SIGNS AND SYMPTOMS

Do these symptoms sound familiar?

- Aches & pains
- Sleep disturbances
- Chronic irritability
- Weight gain in waist
- Depression
- Morning or evening fatigue
- Sugar/food cravings
- Susceptibility to infections
- Diabetes/pre-diabetes
- Low libido

Hot flashes, sweating, insomnia, anxiety
Irritable mood, tiredness, lethargy
Lack of motivation, low mental energy
Depression, low self esteem
Less interest and desire for sex, less sexual activity, poor erection, reduced quality of orgasm and ejaculation
Reduced energy
Decrease sense of well being
Fatigue
Decreased libido and erectile dysfunction
Changes in ejaculation
Decrease in strength and lean body mass
Loss of height, body hair
Increase in body fat
ERECTILE DYSFUNCTION

• Definition: inability to attain or maintain an erection sufficient to complete intercourse
• Neurogenic, Arteriogenic and Vasogenic control
• Atherosclerosis and reduced testosterone play a role in decreased oxygen saturation to tissues leading to fibrosis
• Prevalence at ages 55, 65, 75, 80 was 8%, 25%, 55% and 75% respectively
By the time a man is in his mid-40s, testosterone can be down by 40%.
A Permanent Testosterone and ED Solution

THE ULTIMATE TESTOSTERONE BOOSTER

No Creams - No Pills - No Injections

Hormone Replacement Therapy (dihydrotestosterone, testosterone and estradiol)
Steroid cocktails (anabolic androgenic steroids effects)
Saw Palmetto berry lipid
Herbal Formulations
Black market testosterone

All Chemical Structures Are Not Created Equal!
Effects of Ambiguous Situations
Stress & Our Hormones

Hormone-Related
1. Promotion of fluid retention
2. Increase in cardiovascular disease risk
3. Precipitation or worsening of sleep apnea
4. Gynecomastia
5. Polycythemia
6. Fluctuations in mood
7. Increased rate of development of benign or malignant prostate disease

Non-Hormone-Related
1. Testosterone undecanoate
2. Injectable esters
3. Implantable pellets
4. Scrotal patch
5. Nonscrotal patch
6. Transdermal gels
1. Gastrointestinal bloating and irritation
2. Pain at site of injection
3. Pain or infection at site; extravasation of pellet
4. Local site skin irritation, sometimes significant
5. Occasional mild skin irritation
Lifestyle tips for staying on top of your game...
Aging on biological level
Accumulation of a wide variety of molecular and cellular damage over time

- Aging is the result of the decrease in the number and/or function of cells.
- Every time cells replicate, telomeres shorten until they reach a point where the cells can no longer divide properly.
- Cells with such short telomeres usually become senescent or enter apoptosis, and eventually die.

THE BENEFITS OF SLEEP

- Increased energy
- Sharper concentration
- Better decision making
- Improved memory
- Ability to manage stress
- Better immune system
- Improved physical health

MEDITERRANEAN DIET

- Proteins of high nutritional level
-Value source of Omega-3’s
- Relatively low energy intake
- Rich in potassium
- Improve water retention
- Prevent elevated BP
VITAMINS AND NUTRITIONAL SUPPLEMENTS

This means that people with higher levels of vitamin D may actually age more slowly than people with lower levels of vitamin D.

Telomere length is positively associated with dietary intake of vitamin A in women who do not take multivitamins.

Research has shown that those with higher levels of vitamin D are more likely to have long telomeres, and vice versa.

VITAMINS AND NUTRITIONAL SUPPLEMENTS

Omega-3

Resveratrol

MINDFULNESS

- Reduces pain and enhances the body’s immune system
- Reduces feelings of anxiety, anger, and confusion
- Increases blood flow and slows the heart rate
- Provides a sense of calm, peace, and balance
- Helps reverse heart disease
- Increases energy
- Reduces stress

Researchers have found that persons who meditated scored better on measures of mental health, blood pressure, and other ratings of aging than those who never meditated.
EXERCISE

Exercise aerobically

1. Exercise aerobically

STUDIES SHOW PEOPLE WHO DO NO EXERCISE HAVE SHORTER THAN PEOPLE WHO DO EXERCISE. THESE STUDIES HAVE FOUND THAT EXERCISE CAN LEAD TO THAT ACT NINE YEARS YOUNGER.

“What fits your busy schedule better, exercising one hour a day or being dead 24 hours a day?”

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2. Eat foods that contain vitamin-D3+K

3. Counteract stress

4. Consider daily meditation
5. Increase fun activities

6. Essential support for adrenals with C, D3, E & magnesium, calcium, zinc, selenium & iodine

7. Get Vitamin Zzz’s
8. Prioritize Me time

9. Act the way you want to feel: research shows it works!

Recommended reading: The Happiness Project by Gretchen Rubin.

What You Need to Know to Feel Your Best
Counteract stress with regular exercise

Q: "How many repetitions does it take for us to learn new information or develop new neural pathways for new behavior?"
A: 10,000 times

Another consideration is the 21/90 rule. Adopt a new behavior/lifestyle and practice it for 21 days, then repeat and practice it for another 90-days.

#1 Adaptogens are herbs known to strengthen the adrenals' ability to adapt to stress
2. Reduce weight

3. Boost testosterone levels
4. Reduce testosterone robbers

5. Choose hormone-free foods & lots of organic veggies

6. [No text provided]
Summary of Risks and Benefits of Testosterone Replacement

CONCLUSION

THUS IT MAY BE STATED THAT THE MALE ANDROPAUSE DOES EXISTS. IT AFFECTS THE MEN OVER 40 YEARS OF AGE (SOMETIMES EARLIER). NON-PHARMACOLOGICAL APPROACH AND SELF-MANAGEMENT SUCH AS EXERCISE, WEIGHT CONTROL AND HEALTHY DIET ARE EMPOWERING AND SAFE. EARLY DIAGNOSIS AND THERAPY CAN IMPROVE SYMPTOMS. EARLY IMPLEMENTATION OF NON-PHARMACOLOGIC TIPS FOR FEELING YOUR BEST. TESTOSTERONE REPLACEMENT THERAPY MUST BE ALWAYS ADMINISTERED ONLY BY VERY RESPONSIBLE PHYSICIANS AND UNDER STRICT CASE SELECTION CRITERION AND SUPERVISION.

Thank you for your participation! We hope the information in this presentation has contributed to your knowledge and will empower you to Function at Your Optimal Level!

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References

- Fact Sheets—Ageing and Health WTO, September 2015
- https://www.ncbi.nlm.nih.gov/pmc/articles/PMC291828/
- https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5448123/
- Prevalence of Undiagnosed Testosterone Deficiency in Aging Athletes: Does Exercise Training Influence the Symptoms of Male Hypogonadism? [https://doi.org/10.1177/2042018810390258]